University of California. At the annual banquet Dr. Bushrod W. Allin, of the U. S. Department of Agriculture, outlined the vital rôle of soil investigators in agricultural planning, especially in the critical years to come, if production is to be adjusted to war needs and subsequent adjustments to peace time are to be made without waste and suffering. Officers were elected as follows: Dr. Horace J. Harper, professor of soils in Oklahoma State Agricultural and Mechanical College, became president for 1942, and Dr. Firman E. Bear, professor of soils at Rutgers University, was elected secretary. Dr. Charles E. Kellogg, chief of the Division of Soil Survey in the U. S. Department of Agriculture, is the retiring president. The next annual meeting is to be held in St. Louis in November, 1942.

AN academy conference at Dallas, Texas, has been scheduled to follow immediately the council session on Monday afternoon, December 29. The session will convene in Parlor E, Hotel Adolphus. The council session is set for 2:15, but if the usual practice is followed this session will be adjourned early in order to give the conference ample time for the reading of papers and discussion. A complimentary dinner will be held at 6:30 P.M. Two papers will be presented. The first, "A Progress Report on Research Grants," will be presented by Dr. E. C. Faust, of the New Orleans Academy. The second, entitled "The Development of a Collegiate Division of the Texas Academy of Science," will be presented by Dr. J. C. Godbey.

A CONFERENCE on "The Ultracentrifuge" was held on November 14 and 15, under the auspices of the Section of Physics and Chemistry of the New York Academy of Sciences. Papers were presented by J. W. Beams, University of Virginia; J. W. Williams, University of Wisconsin; W. J. Archibald, National Research Council, Canada; Alexandre Rothen and Duncan A. MacInnes, both of the Rockefeller Institute, the latter acting as conference chairman.

THE eighth annual congress of the American Association for the Advancement of Oral Diagnosis was held at the New York Academy of Medicine on November 13 and 14. Speakers at the meeting included Dr. J. L. T. Appleton, Jr., dean of the Dental School of the University of Pennsylvania, and Dr. Kurt H. Thoma, head of the new school of Oral Medicine at Harvard University.

A SYMPOSIUM on "Recent Advances in the Chemistry of the Nonmetals" will be held in Columbus, Ohio, on December 29, 30 and 31, under the sponsorship of the Division of Physical and Inorganic Chemistry of the American Chemical Society.

THE University of Michigan will be host to chemists who attend the ninth National Organic Chemistry Symposium from December 29 to 31. Dr. Moses Gomberg, University of Michigan, and Dr. William Lloyd Evans, of the Ohio State University, president of the American Chemical Society, will open the symposium, which will be addressed by Homer Adkins, W. E. Bachmann, Leslie G. S. Booker, Nathan L. Drake, Karl Folkers, C. R. Hauser, Morris S. Kharasch, S. M. McElvain, C. S. Marvel, Ralph L. Shriner, Roger J. Williams and Frank C. Whitmore. Inquiries should be addressed to Dr. Arthur C. Cope, Department of Chemistry, Columbia University, New York, N. Y.

DR. ERIC S. PROSKAUER, of Interscience Publishers, Inc., calls attention to the misspelling of names of German physicists in an article printed under "Special Correspondence" in the issue of SCIENCE for November 21. This correspondence, which was entitled "Physics in Pre-Nazi Germany," should have been entitled "Physics in Nazi Germany." It was sent by a Russian correspondent through *Tass*. The editor of SCIENCE, in reading the manuscript, was more concerned as to whether it should be printed than with the spelling of names, in regard to which the proofreaders of SCIENCE are usually very accurate. As a matter of fact, the editor was absent from his office attending the meeting of the American Philosophical Society in Philadelphia when the proof was received. Such names as Klausius for Clausius appear to be due to a transcription of German names into Russian and retranscription into English. The names are obvious, but the errors in spelling are regrettable.

DISCUSSION

NICOTIANA RUSTICA IN NEW MEXICO

PROFESSOR LESLIE A. WHITE reports[1] finding *Nicotiana rustica* cultivated in 1934 by the Tamaya Pueblo Indians near Bernalillo, New Mexico, and states:

> This discovery is of interest for two reasons: (1) There is very little evidence indeed to indicate that tobacco of any kind has ever been cultivated by the Pueblo Indians of the Southwest; and (2) it is surprising to find this particular species of Nicotiana in this region. . . .
>
> The presence of this species under cultivation at Tamaya to-day remains to be explained. It may have been introduced within the past 50 years or so from some eastern Indian reservation, to be sure. But the possibility that it may be a relic of the original diffusion from Mexico can not be entirely dismissed at this time.

[1] Leslie A. White, SCIENCE, Vol. 94, p. 64.

The suggestion is offered that the presence of *Nicotiana rustica* in the vicinity of Bernalillo in 1934 and 1936 as reported by Professor White may have been due to its rather recent introduction by the white man. In 1925 a commercial development was undertaken for the production of *Nicotiana rustica* for nicotine in the upper Rio Grande Valley. In 1927 several hundred growers were reported engaged in the production of the species on plots ranging from fractions of an acre to 8 or 10 acres. Most of the growers were located north of Albuquerque, and more than 200 acres were reported grown in 1927. This project was developed and managed by Mr. R. G. Mewborne, of the Consumers Tobacco Company of Albuquerque, New Mexico, and continued through 1929.[2]

Between 1926 and 1929 the writer was also interested in the experimental production of nicotine in the Rio Grande Valley and had plots grown near Albuquerque, Las Lunas and Las Cruces, New Mexico. Several varieties of *Nicotiana rustica* were grown, although brazilia was the one used in the general commercial production.

During the period of 1925 to 1929 rustica plants and, no doubt, seeds as well, were easily available in the upper Rio Grande Valley, and it is suggested that the presence of the rustica plants near Bernalillo might well be traced to the wide-spread development which was attempted in that area between 1925 and 1929.

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U. S. Department of Agriculture

A NOTE ON THE DETERMINATION OF THIAMINE BY THE YEAST FERMENTATION METHOD

In a recent issue of Science[1] a paper on thiamine determination contained the following paragraph:

> Bunzell's difficulties recall the experience of Smythe, who, observing a remarkable stimulation of fermentation due to an extract of bull testicle, finally isolated ammonium chloride as the active factor. Smythe made the additional mistake of obtaining his yeast from the small cakes sold in grocery stores. Such yeast is too rich in thiamin to show any stimulation of fermentation when thiamin is added to the medium.

This curious paragraph contains both misstatements of fact and false implications so a correction is considered necessary. My paper[2] was not concerned with the determination of thiamin. It was concerned with finding out why the extracts in question stimulated fermentation when thiamin did not stimulate. Consequently, it was neither a mistake nor an additional mistake to use a yeast rich in thiamin. It clearly would have been a mistake to use a yeast in which thiamin was not present in excess.

Although ammonium chloride was isolated and shown to stimulate fermentation under certain conditions by as much as 100 per cent., the activity of the extracts was not found to be due solely or even chiefly to the ammonium chloride contained in them. From the chemical behavior of the extracts it was suggested that the activity was due to amino acid amides—free and combined. In accord with this suggestion glutamine and asparagine were shown actively to stimulate fermentation. d-Arginine also was found to be an active stimulator. As stated in the paper[2] an accelerating effect of ammonium salts on fermentation had been established as long ago as 1926,[3] but an accelerating effect (as distinct from a growth effect) for the other compounds mentioned had not been established as far as I am aware.

The above results were presented at a symposium held at Gibson Island in August, 1938,[4] and appeared in the February, 1939, issue of *Enzymologia*.[2] It is interesting to note that the first published account of the thiamin fermentation method to properly define the principle and limitations of the analysis was sent to press in May, 1939.[5] The fact that asparagine and arginine (along with some other less active amino acid compounds) stimulate fermentation was published by the same authors as new information in September, 1939,[6] and is cited by them in their recent paper as showing that various amino acids, etc., have an effect equivalent to ammonium ions.

C. V. Smythe

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EXCEPTIONAL BURIAL IN CALIFORNIA

During excavations carried on by the Santa Barbara Museum of Natural History, a unique burial was uncovered on Mescalitan Island, an old Indian site, near Santa Barbara, California. This find is outstanding among burials of the west coast.

The skeleton of a small adult, age 30–35, lay in the conventional face-down flexed position of the Canaliño (Chumash), but upon the highly inlaid scapula of a whale. The scapula had served as a slab, or a coffin without top or sides, and measured 46½ inches transversely and 30 inches proximo-distally. The spine had been planed off with stone tools, forming a perfectly flat surface upon which the skeleton lay. Around the superior border a narrow groove was cut and in this,

[2] R. G. Mewborne, "Tobacco as a New Industry for New Mexico," New Mexico State Planning Board, Santa Fe, 1936.

[1] A. S. Schultz, L. Atkin and C. N. Frey, Science, 94: [illegible], 1941.

[2] C. V. Smythe, *Enzymologia*, 6: 9, 1939.

[3] H. Zeller, *Biochem. Zeits.*, 175: 135, 1926.

[4] Science, 88: 9, 1938.

[5] L. Atkin, A. S. Schultz and C. N. Frey, *Jour. Biol. Chem.*, 129: 471, 1939.

[6] A. S. Schultz, L. Atkin and C. N. Frey, *Cereal Chem.*, 16: 648, 1939.